

India's Nuclear Safety & Security: Implications for South Asian Strategic Stability

Syeda Tahreem Bukhari¹ and Nazia Sheikh²

Article Information	Abstract
Received: Aug 25, 2025 Revised: Dec 04, 2025 Accepted: Dec 31, 2025	The proliferation hazards and the illegal use of nuclear material and related technology have long been a source of concern. India aspires to play a major role on the regional and global front, while at the state level; it struggles with nuclear security lapses. The recurring incidents of nuclear theft highlight significant flaws in India's nuclear policy and security mechanisms. This research explores the inconsistency between India's nuclear regulatory structure and the rules set out by the International Atomic Energy Agency. India's noncompliance with nuclear security protocols creates a significant danger to the security of South Asia due to the possibility of hazardous material getting into the wrong hands. The privatization of the nuclear sector would further raise the risk of undermining centralized control over nuclear materials and opening possible gaps for illegal entry, diversion, or theft. The provocative nuclear discourse by India further endangers the stability of the region, increasing the chances of miscalculation. India is one of the countries whose nuclear arsenals increased in 2023, with a focus on long-range missiles, such as the recent flight test of ICBM Agni V. SIPRI Yearbook 2024 also views the expanding number and types of nuclear weapons in India as a potential escalation in the region. This research analyses how India's growing nuclear arsenal, without adequate safety and security measures, would have implications not only for South Asia but also for the entire world.
Keywords <i>India,</i> <i>Nuclear Safety and Security,</i> <i>IAEA,</i> <i>Nuclear Theft,</i> <i>Strategic Stability,</i> <i>South Asia</i>	

1. Introduction

In international security studies, attention was diverted towards nuclear safety and security as the events unveiled the threat it posed. For instance, following the disintegration of the USSR, academics and policymakers were deeply concerned about the fate of its nuclear weapons and infrastructure (Kapur, Rajagopalan, & Wueger, 2024). Previously, the majority of researchers and analysts dealing with nuclear-related issues had shifted their attention to other directions, for instance, how nuclear weapons serve the purpose of deterrence and coercion in the case of a dispute (Ellsberg, Sanders, & Caplan, 1992). Nonetheless, a nuclear-related catastrophe is less likely to occur during a nuclear conflict than a mishap during peacetime or a terrorist attack at a power station.

¹Syeda Tahreem Bukhari is an Associate Director at the Center for International Strategic Studies, AJK. A NESAs Alumni and an MPhil Scholar in Peace and Conflict Studies from National Defence University, Islamabad. Email: tahreembukhari1692@gmail.com

²Nazia Sheikh is a Research Officer at the Center for International Strategic Studies, AJK. She holds an MPhil in International Relations from the International Islamic University, Islamabad. Email: nsheikh536@gmail.com

The safety of these radioactive substances is a national obligation, and any failure in this regard would have serious repercussions for the entire region, since non-state actors can easily obtain nuclear material to make "dirty bombs" or "conventional explosives." Owing to the illegal uranium trade, the threat of nuclear terrorism grows. In the context of South Asia, which housed two rival nuclear-armed neighbours, the safety and security of nuclear material became a grave concern, posing a serious risk to regional and global security. The rampant nuclear theft incidents in India exposed fundamental lapses in command-and-control system, regulatory mechanism and safeguard measures.

India is expanding nuclear warheads on one side while shows non-compliance towards the legal measures that assures the security and protection of sensitive material such as Convention on Physical Protection of Nuclear Material (CPPNM) and its Amendment 2005 along with International Atomic Energy Agency Additional Protocols. These legal instruments and the UNSC Resolution 1540 abstain states from the spread of nuclear, chemical and biological weapon to non-state actors. Instead of taking measures to control the nuclear theft incidents, India is aiming to privatize its nuclear sector, which would further weaken nuclear regulatory oversight. It also raises possibility of illegal access to sensitive material leading to safety violations.

Furthermore, the politicization of nuclear rhetoric in India exploited nuclear fears. The political leaders politicize the nuclear rhetoric for political and electoral gains like Indian Prime Minister Narendra Modi's blatant statement in the aftermath of Balakot crisis threatening to nuke Pakistan. Similar to this, Indian Defence Minister Rajnath Singh made a public demand that Pakistan's nuclear weapons be handed over to the IAEA; these statements are generally regarded as a politically driven and dangerous step. Furthermore, as part of an information warfare plan to undermine Pakistan's nuclear credentials, India has been disseminating false information regarding a purported radioactive leak in Pakistan. Following the propaganda campaign initiated by India, John Bolton, former US National Security Advisor becoming prey to this misinformation and commented on Pakistan's nuclear program, questioning its ability to handle nuclear weapons, which was biased and misguided. He overlooked the sharp contrast between the two nuclear-armed states, where one state is prone to growing nuclear theft incidents while Pakistan's track record is clear of any such nuclear theft. India despite not being a signatory to the Non-Proliferation Treaty (NPT), its attempt to join the Nuclear Suppliers Group (NSG) has drawn intense criticism on a global scale. In this regard, Islamabad and Beijing have repeatedly raised objections on India's membership for NSG owing to its poor nuclear safety and security that compromised the objectives of Nuclear Supplier Group and the non-proliferation efforts. India is not only selectively implementing the international standards but also exploiting the nuclear narratives.

The politicization of nuclear rhetoric by India accompanied with nuclear safety lapses would have hazardous implications towards the strategic stability of South Asia where New Delhi indulged in increasing nuclear stockpiles while ignoring the safety and security of nuclear arsenals. There are justifiable nuclear safety and security concerns raised by the growing radicalization of India's media, political landscape, and societal groups. The continued existence of a nuclear black market in India, which exposes significant flaws in its nuclear security architecture as shown by frequent instances of theft and illegal trafficking of sensitive nuclear materials, exacerbates these concerns even further. Global institutions must act quickly to address the threat of nuclear terrorism, the deterioration of deterrent credibility, and the politicization of nuclear concerns.

1.1 Objectives of the Study

This study aims to analyse India's nuclear safety and security procedures critically, document the increasing number of nuclear theft incidents, evaluate its adherence to international legal requirements, and assess the regional ramifications that are still directly affected by India's nuclear behaviour.

2. Literature review

Illicit use and proliferation risks of nuclear material have long been an international concern as they present a danger to global security and stability. Global security obligations are a mixture of tangible and non-tangible elements to ensure nuclear security responsibilities. Physical protection has been used to describe nuclear security according to the Physical Protection of Nuclear Material and Nuclear Facilities 225/Rev. 5. Physical protection can be considered a subset of nuclear security (Iqbal, 2024).

The South Asian strategic context provides a diverse range of deterrence debates on certain geostrategic and geopolitical realities between India and Pakistan. In the field of strategic studies, nuclear deterrence is the most interesting topic, covering various aspects of security. Rizwana Abbasi and Zafar Khan, *Nuclear Deterrence in South Asia: New Technologies and Challenges to Sustainable Peace*, highlighted in their book the developments from the perspective of new technologies and their implications on the sustainable peace in South Asia. The debate in the book revolves around the strategic stability, deterrence stability, security dilemma, and defensive realism explain the geostrategic and geo-economic aspects at the regional and international level (Abbasi & KHAN, 2021).

Pakistan and India have divergent goals in South Asia, while Pakistan seeks to maintain strategic stability, India wants to become a great power. India's ambitions to become a great power are further fuelled by national Hindutva ideology with hostile and aggressive policies. India's technological advancements and rapid military modernization disrupt the balance of power in the region. Along with that contradicts NFU policy and official military doctrine, further complex crisis instability (Riaz, 2025).

3. Qualitative Research Method

This research employs the qualitative research method to collect primary and secondary data. Data to analyse India's nuclear safety and security was collected through government reports, research journals, think tank studies, official policy documents, and government reports.

4. Nuclear Theft Incidents in India

According to a timeline released by the South Asia Strategic Stability Institute (SASSI), there were 18 recorded incidents in India between 1994 and 2021 concerning the illicit possession and loss of over 200 kilograms of nuclear material. Even though India has been involved in these instances since the 1970s, there have been reports that the country was also involved in the theft of nuclear fissile material; this threat increased dramatically in the 1980s and 1990s (Mazari & Sultan, 2014). It was discovered by the CIA in the late 1980s that India was attempting to produce a highly advanced hydrogen weapon. A tip led to the interception of a \$24 million consignment of beryllium in Vilnius in 1994. It was believed that the buyer was from either North Korea or India, even though the shipment was stopped before it could reach the purchaser. The first recorded instance of nuclear smuggling in India is from November 1994, when police in Meghalaya captured a group of four people who were smuggling 2.5 kilograms of uranium from the Domiasiat region of the country. Another significant nuclear theft event occurred in 1998 when a West Bengal opposition politician was detained on suspicion of transporting over 100 kg of uranium. A highly radioactive container containing uranium was taken in December 2006 from a research facility in Eastern India. Within 1.5 kilometres, its radiation could have dangerous effects. Three individuals were apprehended by the Navi Mumbai Crime Branch with five kilograms of depleted uranium.

A three-person group from Bihar was detained on August 9, 2024, on suspicion of smuggling 50 grams of radioactive californium. Just after a few days on August 17, 2024, at Chaudhary Charan Singh Airport, Lucknow, radioactive material was found in the cargo area. This episode is just one more gem in India's long history of nuclear thefts. Even in July 2024, five guys from Dehradun were

taken into custody after stealing a black box containing radioactive material from the Mumbai-based Bhabha Atomic Energy Centre.



Figure 1 Info-graph highlights nuclear theft incidents in India, Source CISS AJK

Three years prior, a different group from Lucknow was apprehended for importing 340 grams of California. Five men were detained in Kolkata in 2018 for selling one kilogram of uranium for three crore rupees in the open market. In May 2021, the Maharashtra Anti-Terror Squad uncovered another nuclear embezzlement fraud in which a scrap dealer had 7 kilograms of uranium. The vulnerability of India's nuclear safety command and control was made obvious by this tragedy. A month later, there was another instance reported in Jharkhand, where seven members of a gang were apprehended by police as they planned to sell 6.4 kg of uranium on the black market. The same year, two suspects who were reportedly involved in the smuggling of 250 grams of Californium; a synthetic element created in a lab were apprehended close to the Kolkata airport.

The sort of instances that have occurred in India raises the possibility that those working at nuclear power plants or mining sites are either independent contractors or members of a gang network. They are probably aware of the advantages and disadvantages of a facility as well as the vulnerabilities that can be used against it. India could confront a variety of insider dangers. They may be involved in providing adversaries with information about the organizations and routes utilized to transport nuclear

material, stealing small amounts of nuclear material to sell on the black market, or using cyber technologies to harm or even destroy the installation's data and infrastructure.

Indian 90 to 110 nuclear bombs are stored in government-run sites patrolled by the Central Industrial Security Force (CISF), as per an estimate by Stockholm International Peace Research Institute, an independent think tank, and Indian officials (Levy & Smith, 2015) . The table 1.1 below illustrates the security forces guarding sensitive nuclear sites.

Stage	Site	Responsible Force
Mining & Processing (UCIL)	Eight mines, three processing plants	CISF and other guards
Storage (Nuclear Fuel Complex)	Two sites	CISF
Solvent & additive production (HWP)	Seven sites	For radioactive sites – CISF, For non-radioactive sites - State Police
Power Production (NPCIL & Bhavini)	Twenty-two plants	CISF (inner perimeter), State Police (outer perimeter)
Vitrification & storage	03 plants	CISF
Transportation	Null	State Police & CISF
Post-Disaster	Null	Other agencies & CISF
Research Units	06 sites	Indian Coast Guard for the Bhabha Atomic Research Center & CISF
Strategic Installations	Information not available	Information not available
Border Surveillance	Null	Individual frontier agencies

Table 1: Source (Thakkar, 2021)

In the incident at the Madras Atomic Power Station in Kalpakkam, the head constable of the same security team murdered his immediate senior and two other force members by firing his service rifle (The Times of India, 2014). The incident served as a new illustration of the grave deficiencies that exist in the nuclear security unit that is entrusted with guarding one of the biggest arsenals of fissile materials and nuclear explosives in the world. It also raised doubts about whether a nation with a turbulent past had taken the necessary safety measures to protect its vital infrastructure and prevent individuals with malice or, in the worst-case scenario, ties to terrorist organizations, from stealing the components of a devastating nuclear weapon. The Nuclear Threat Initiative's (NTI) Nuclear Security Index ranked India below the median, which measures things like accounting and regulating procedures, preventing insider threats, and general security culture.

5. Cybersecurity and Nuclear Infrastructure

The digitization of the nuclear sector has led to an increase in the sophistication and prevalence of cyber threats to nuclear infrastructure, despite efforts by states to develop new defence strategies. Due to the plant's ignorance of its vulnerabilities, the Kudankulam Nuclear Power Plant (KKNPP), an Indian nuclear-powered station, was the target of a concerning cyberattack in 2019. The network was not connected to any other external networks, according to the KKNPP, which first disputed that an attack had taken place. The attack's features, including the use of Dtrack malware, had been utilized for financial institution attacks in the past. Given that it only affected the plant's administrative network and spared its control systems, this tragedy could have been far worse. Nevertheless, it demonstrates how urgently India's nuclear enterprise needs to upgrade its security procedures and framework.

Nation-states, cyber criminals, terrorists, hacktivists, and insiders are some of the sources of cyber threats to the nuclear enterprise. Their malicious behaviour may lead to increased regulation, economic losses, environmental harm, public health risks, and a decline in public trust in nuclear power in general, as well as the nuclear facility specifically, furthermore threatening the stability of the South Asian region with a nuclear threat looming (Kapur, Rajagopalan, & Wueger, 2024).

6. India's Privatization of the Nuclear Sector

India's decision to privatize certain parts of its nuclear sector is another important but little-discussed issue. As India's finance minister, Nirmala Sitharaman confirmed in February 2025, during the budget presentation, that the government is planning to modify two important nuclear energy laws, including the Civil Liability of Nuclear Damage Act of 2010 and the Atomic Energy Act of 1962, to facilitate the privatization process (GOVERNMENT OF INDIA, 2025). Though India considered this a significant change, a step towards energy development and modernization, it has substantial consequences. Given New Delhi's nuclear safety and security record, the privatization of nuclear sector would be disastrous. The recorded nuclear theft incidents in India since 1990s signal towards the presence of nuclear black market in India. The nuclear smuggling would further aggravate following the privatization of nuclear sector that prefer profit to safety. The chances of mishaps would intensify in private sector that fosters lack of responsibility. The centralized control over the sensitive material would be undermined by the involvement of private sector, that might open up possible gaps for illegal entry, diversion or theft of radioactive material. (Sheikh, 2025). The change in civil nuclear liability law would encourage investment whilst the accountability would be reduced, this policy change would be threatening under the weak nuclear safety and security in India.

All of the nuclear power reactors of India are not under IAEA safeguards such as Kakrapar 1 and 2, Narora 1 and 2 nuclear power reactors are working without IAEA inspection that hinder international regulatory control mechanism. (Futter, 2021) With a weak international control over nuclear sector, privatization of this sector would further endanger regional and international stability. International trust in India's nuclear governance could be damaged by privatization without explicit safeguards, especially as India is not a member of the Nuclear Non-Proliferation Treaty (NPT) and depends on special exemptions granted, like the 2008 NSG waiver. India's nuclear sector privatization needs to be closely examined both domestically and internationally if nuclear safety is to continue to be a non-negotiable global priority. Furthermore, keeping in view the associated risks it must be ensured that the privatization is limited to civilian and non-sensitive segments of the nuclear sector, excluding uranium enrichment, plutonium handling, and spent fuel reprocessing. In addition, it should also be ensured that the Atomic Energy Regulatory Body (AERB) is a fully independent statutory body with oversight over both public and private nuclear entities.

7. India's Violation of Nuclear Legal Frameworks

Under the IAEA's authority, India has signed and ratified the Convention on the Physical Protection of Nuclear Material (CPPNM), its 2005 Amendment, and the United Nations Convention on Nuclear Safety, the main universal legal framework for nuclear security. Under the CPPNM, the Parties are bound to cooperate internationally in cases of robbery, theft, or any other illegal taking of nuclear material, or in a situation in which there is an adequate fear of such taking; to make certain nuclear-related crimes illegal; and to physically safeguard nuclear material sent abroad for peaceful aims. The Convention requires that parties make sure that nuclear materials for peaceful objectives are protected at the appropriate levels when being transported internationally across their territory or on ships or planes that are solely under their control (as defined in IAEA INFCIRC/2251 and classified in Annexes I and II of the Convention).

Additionally, in some circumstances, radioactive material used domestically for peaceful aims—including its transit and storage—is covered by the Convention. Unless they receive guarantees that nuclear materials would be safeguarded throughout universal transportation in compliance with the

levels of protection specified by the Convention, parties commit to not exporting, importing, or permitting the transit of nuclear materials through their territory. The parties also agree to exchange information on lost nuclear materials to expedite their recovery.

India is primarily responsible for ensuring strong security measures, especially when handling sensitive material, as a signatory to the CPPNM since 2002 and 2005. However, within the past thirty years, there have been over twenty recorded attempts in India to steal uranium and materials that are radioactive materials. India must fully implement and strengthen compliance with the CPPNM, especially post-2005 amendment that enhances security obligations.

India supposedly adheres to the nuclear security culture, which is of the utmost importance. It has, however, fallen short in safeguarding its nuclear material and fighting the repeated arrests of illicit uranium and radioactive material trafficking. Furthermore, according to the 2009 agreement reached in cooperation with the IAEA, India possesses approximately twenty-two nuclear power reactors, eight of which are exempt from IAEA safeguards (Iqbal, 2022). Stronger engagement of IAEA is required in order to urge India to expand the scope of IAEA safeguards and allow more robust, transparent inspections even for civilian-use facilities.

In 1970 NPT entered into force. The primary components of the NPT are: International efforts to advance nuclear energy for peaceful uses, stop the spread of nuclear weapons and related technology, and advance nuclear disarmament. Regarding disarmament and non-proliferation, this treaty is the most extensively complied with, having about 191 parties. As the inspection body for international safeguards established by Article III of the Treaty, the IAEA has a specific verification duty even though India is not a party to the Treaty (Zubair, Radkiany, Akram, & Ahmed, 2024). According to its statute, the IAEA facilitates the transfer of nuclear technology to its Member States for peaceful uses through a multinational mechanism (Alkis, 2017). The IAEA found in a 2017 report that India's guarded nuclear power plants were "not in compliance" with international safety standards. The research also revealed that India has not taken the required steps to address the safety concerns at these facilities (Hafeez, 2023).

India does not have the comprehensive security measures that NNWS signatories to the NPT have, since it is a non-signatory. Only specific facilities are covered by safeguards, according to India's Additional Protocol. Under the Model Additional Protocol, information on research and development linked to the nuclear fuel cycle, nuclear imports, and uranium mining is shared, whereas the Protocol only requires India to submit information on exports connected to nuclear energy. Furthermore, the IAEA is unable to investigate undeclared sites due to supplementary access provisions that are absent from India's Additional Protocol. Even though the IAEA does not officially recognize India as a nuclear weapon state, it has ratified the Additional Protocol based on many of the voluntary safeguard measures that apply to nuclear weapon states (IAEA, 2024). India is not paying heed to the establishment of an independent regulatory body to supervise nuclear safety and security, which has been repeatedly suggested by international authorities. India's noncompliance with nuclear security protocols creates a significant danger to the security of the South Asian area due to the possibility of hazardous material getting into the wrong hands.

The safeguards agreement with India was approved by the IAEA. On March 3, 2009, the agency was granted additional authority to monitor India's nuclear-related civilian activities. An "India-specific" deal was made with the IAEA. In 2008, New Delhi, which is not a party to the Nuclear Non-proliferation Treaty (NPT), placed certain of its nuclear installations under safeguards while keeping other facilities open for use in India's nuclear weapons program. The adoption of an exemption for the sharing of nuclear technology with India by the 45-member Nuclear Suppliers Group (NSG) was made possible by that agreement.

IAEA should recommend India to align its domestic laws with international best practices by strengthening laws under the Atomic Energy Act and establishing stricter penalties and monitoring mechanisms. The international community should also uphold the non-discriminatory access to

peaceful nuclear technologies. In actuality, a state's commitment and capacity to simplify its nuclear security procedures should be a prerequisite for any meaningful integration into the international non-proliferation framework, such as membership in the Nuclear Suppliers Group (NSG), and it should not be state-specific (Ali, 2024). Any leniency in this regard would imply the credibility of the export control regime.

7.1 UNSC Resolution 1540

To prevent the proliferation and delivery of Weapons of Mass Destruction (such as nuclear, chemical and biological weapons) to non-state actors, United Nations Security Council adopted Resolution 1540. The states widely supported the implementation of this resolution, Pakistan's permanent representative to the UN not only endorsed the resolution and assures Pakistan's commitment towards safety and security of nuclear weapons but also demanded international investigation into the nuclear theft incidents and also insisted the UNSC to take appropriate measures to stop this illegal trade of radioactive material. He also highlighted that the frequent nuclear theft happenings signals towards the presence of nuclear black market.

Pakistan has fulfilled its responsibilities as a responsible nuclear country by fulfilling its commitments as per resolution 1540. To restrict the transfer of sensitive products and technologies, Pakistan has put in place: (i) a strong command and control structure; (ii) a strict legislative, administrative, and enforcement framework; and (iii) an extensive export control regime that adheres to the highest international standards (Ali, 2024).

Pakistan also raised concerns regarding the security and safety of nuclear weapons in its neighbouring country. The UN Security Council ought to be deeply concerned about the ongoing theft and unlawful sale of nuclear and Additional radioactive substances. Pakistan also brought up the recent nuclear theft incidents in India to the Security Council's attention, in which a group was discovered to be in unlawful possession of a significant amount of highly radioactive and toxic material, known as Californium, valued at \$100 million. The incidents also included three other instances of California theft that were reported in the same state in 2021 (Permanent Mission of Pakistan to the United Nations, 2024).

8. Nuclear Theft Incidents and Regional Concerns

The unprotected Indian nuclear arsenals irrevocably threaten the strategic stability of South Asia. The Brahmos Missile incident already raised doubts on India's Command and Control system, when a nuclear-capable missile misfired in Pakistani territory. It highlights India's inefficiency in handling its nuclear arsenal (Khawaja, 2022). India's incompetency in holding sensitive technology further endorsed by another incident took place in March 2023 where three surface to air missiles were misfired during Pokhran military drills near Pakistan border. (Khan, 2023) The recent May escalation between Pakistan and India where missiles were fired, the space for misfire is reduced. The nuclear brinkmanship in this volatile environment further threatens the stability of South Asia.

The danger of nuclear and radiological terrorism to India's facilities would rise as its nuclear capabilities continue to develop. India's nuclear facilities are susceptible to terrorist attacks, especially those located in areas where political unrest or insurgencies are still present. To guarantee more stringent controls and monitoring, the international community, particularly the US, should reevaluate India's Nuclear Supplier Group (NSG) waiver.

China and Pakistan have both voiced serious concerns about the possibility of a black market for dual-use, sensitive minerals in India. They fear that the ongoing weakness in India's nuclear defences may enable non-state entities to target them. Pakistan has asked the whole community to look into and ensure the safety and security of nuclear materials (Latif, 2024). To lower security risks, China also requested that the international community, enforce more rigorous non-proliferation policies (Jun,

2024). With rising incidents of nuclear theft, India genuinely wanted to be integrated into the global non-proliferation architecture, which includes being a member of the Nuclear Suppliers Group (NSG). If international bodies are lenient toward countries such as India, other countries will view these international non-proliferation mechanisms as biased and misleading (Ali, 2024).

Ensuring the safety of their nuclear materials is of utmost importance for states possessing nuclear weapons. The states' increasing nuclear stockpiles, with a looming nuclear threat further endangering international peace and security. India is one of the countries whose nuclear arsenals increased in 2023, with an emphasis on long-range missiles. SIPRI Yearbook 2024 also highlighted concerns regarding the expanding number and types of nuclear weapons worldwide (SIPRI, 2024). India's entry into the military buildup without adequate safety and security measures will have an impact not only on South Asia but the entire world because its long-range missiles are also aimed at the US and Canada. The entire world has to demand a comprehensive probe into these frequent instances of nuclear theft. India needs to establish an independent nuclear regulatory agency that would be in charge of managing, controlling, and overseeing all issues about nuclear security and safety.

9. Politicization of Nuclear Narratives

India's provocative nuclear discourse is against the norms of responsible nuclear behaviour. Indian media outlets spread false rumours of a radioactive leak in Pakistan following the recent escalation between the two nuclear-armed neighbours, causing unnecessary fear and mistrust. IAEA had to intervene for clarity, refuting Indian media reports (The Express Tribune, 2025). Following these baseless claims, Indian Defence Minister Rajnath Singh made a statement expressing concerns over Pakistan's nuclear arsenal without providing any supporting evidence or IAEA consent (The Express Tribune, 2025).

Such conduct is not new, strategic stability in South Asia was undermined by senior Indian officials' covert nuclear threats during the 2019 Balakot conflict. Narendra Modi's statement following the 27 February Balakot Strike was "Qatal ki Raat." While in a rally, quoting, and "Nuclear weapons not being kept for Diwali (Yousaf, 2019)." India also runs campaigns to defame Pakistan's nuclear program, evident in John Bolton's statement questioning Pakistan's ability to handle nuclear weapons while ignoring rampant nuclear theft incidents in India. The fake news and nuclear rhetoric should be dealt with iron hand that breeds mistrust, threatening peace and security of the region. India should avoid politicizing nuclear discourse particularly for domestic or political point scoring at the time of crisis.

International community and the IAEA must take into account the nuclear theft incidents in India, the nuclear rhetoric by the leaders, and the nuclear safety and security in India. No nation should be exempted from responsibility if nuclear safety is to be addressed seriously.

10. Conclusion

The growing threat to South Asian peace and security is the nuclear program of India, with recurring nuclear theft incidents accompanied by regulatory flaws and security lapses. The situation further aggravated by India's non-compliance of international legal frameworks that aims to enhance nuclear safety and security, restricting illegal access to nuclear material such as the Additional Protocols of the IAEA, UNSC Resolution 1540, and the CPPNM and its 2005 Amendment.

Nuclear theft incidents in India exposed structural flaws in its command-and-control system. Instead of improving its security measures, India is privatizing the nuclear sector that would further weaken the safety and security of sensitive material might ended up in hands of rogue elements. The politicization of nuclear rhetoric by Indian officials such as its Prime Minister and other officials legitimize the illegal access to radioactive material and its misuse against the neighbouring states. The Brahmos misfire incident followed by another mishap during Pokhran military exercises raised

questions on India's ability to handle sensitive technology might be in rogue hands of RSS. If this were the case, the politicization of nuclear discourse would have disastrous impacts for the region and beyond.

Despite these concerning facts, India not being the member of NPT granted NSG waiver. It not only raised doubts on the legitimacy of international non-proliferation regimes, but also emboldened India to indulge in nuclear arms race where it is increasing its nuclear stockpiles with poor nuclear safety and security. To stop the nuclear catastrophe in South Asia, impartial, non-discriminatory, and legally based approach is required. Rule-based accountability is required to restore trust on non-proliferation regimes. All the states acquiring nuclear weapons must be held to the highest levels of accountability, transparency, and security.

India's weak nuclear command and control system with selective compliance to non-proliferation standards, growing nuclear theft incidents, and the politicization of nuclear rhetoric posed a significant threat to regional and international stability. These vulnerabilities could have devastating implications if left unaddressed. In addition to strengthening of global nuclear governance, an increased international scrutiny is required to maintain the strategic stability in South Asia.

References

- Ali, B. (2024, September 26). India's Uranium Theft Crisis and the International Silence. *The Friday Times*.
- Ali, B. (2024, September 26). India's Uranium Theft Crisis and the International Silence. *Friday Times*.
- Alkış, M. A. (2017). THREAT OF NUCLEAR TERRORISM: TOWARDS AN EFFECTIVE NUCLEAR SECURITY REGIME. *Hacettepe University Graduate School of Social Sciences*, 1-135.
- Dawn*. (2023, February 17). Retrieved from IAEA chief sees promising prospects for nuclear energy in Pakistan: <https://www.dawn.com/news/1737575>
- Ellsberg, D., Sanders, J., & Caplan, R. (1992). Nuclear Security and the Soviet Collapse. *World Policy Journal*, 135–156.
- Futter, A. (2021). *The Politics of Nuclear Weapons*. London: Palgrave Macmillan Cham.
- GOVERNMENT OF INDIA. (2025, February). Retrieved from BUDGET 2025-2026: https://www.indiabudget.gov.in/doc/budget_speech.pdf
- Hafeez, Q. t. (2023, July). South and Central Asia. Are Indian Nukes Safe And Secure? *Eurasia Review*.
- IAEA. (2024). *IAEA Safeguards Serving Nuclear Non-Proliferation*. Retrieved from IAEA : <https://www.iaea.org/sites/default/files/18/09/sg-serving-nuclear-non-proliferation.pdf>
- Iqbal, R. (2022, October). Evaluating Nuclear Security in India. *Centre for Strategic and Contemporary Research (CSCR)*.
- Jun, Z. (2024, March 19). *China calls for int'l efforts to promote nuclear disarmament, non-proliferation*. Retrieved from Xinhua: <https://english.news.cn/20240319/bca739f43d284f1d857abf004d413c79/c.html>
- Kapur, S. P., Pillai, R. R., & Diana, W. (2024). *The Challenges of Nuclear Security U.S. and Indian Perspectives*. London: Springer Nature.
- Kapur, S. P., Rajagopalan, R. P., & Wueger, D. (2024). *The Challenges of Nuclear Security: U.S. and Indian Perspectives*. Cham, Switzerland: Springer International Publishing.

- Khan, A. M. (2023, June 6). Missiles Misfiring: Indian Incompetence and Negligence. *Centre for Strategic and Contemporary Research (CSCR)* .
- Khawaja, D. A. (2022, March 22). Brahmos fire on Pakistan: A question mark on Indian credibility as responsible state actor. *Global Village Space*.
- Latif, A. (2024, August 13). *Pakistan 'gravely' concerned over 'recurring' theft, sale incidents of nuclear materials in India*. Retrieved from Anadolu Agency.
- Levy, A., & Smith, R. J. (2015). *India's nuclear explosive materials are vulnerable to theft, U.S. officials and experts say*. Washington, D.C: Center for Public Integrity.
- Mazari, D. S., & Sultan, M. (2014). NUCLEAR SAFETY & TERRORISM: A CASE STUDY OF INDIA. *Institute of Strategic Studies Islamabad (ISSI)*, 1-29.
- Permanent Mission of Pakistan to the United Nations*. (2024, October 9). Retrieved from Pakistan Urges UNSC to Investigate Theft and Illicit Sale of: https://pakun.org/uploads/10092024_01_6b4f339ba1.pdf
- Sheikh, N. (2025, February). India's nuclear sector: rising risks. *Pakistan Observer* .
- SIPRI. (2024). *SIPRI Yearbook: Armaments, Disarmament and International Security*. New York: SIPRI.
- Thakkar, C. (2021, July). Rethinking Nuclear Security: The Case for an Elite Nuclear Force in India. *Stimson Center* .
- The Express Tribune*. (2025, May 16). Retrieved from IAEA refutes Indian media reports of radiation leak in Pakistan: <https://tribune.com.pk/story/2546057/iaea-refutes-indian-media-reports-of-radiation-leak-in-pakistan>
- The Express Tribune*. (2025, May 15). Retrieved from Pakistan slams Indian defence minister's remarks on nuclear arsenal: <https://tribune.com.pk/story/2546024/pakistan-slams-indian-defence-ministers-remarks-on-nuclear-arsenal>
- The Times of India*. (2014, October). Retrieved from The Times of India: <https://timesofindia.indiatimes.com/city/chennai/3-cisf-personnel-shot-dead-by-colleague-in-kalpakkam-atomic-power-plant/articleshow/44674929.cms>
- Yousaf, K. (2019, April 22). *The Express Tribune* . Retrieved from Pakistan denounces Modi's nuclear threat as 'highly unfortunate and irresponsible': <https://tribune.com.pk/story/1956656/pakistan-flays-modis-irresponsible-war-rhetoric>
- Zubair, M., Radkiany, R., Akram, Y., & Ahmed, E. (2024). Nuclear safeguards: Technology, challenges, and future perspectives. *Alexandria Engineering Journal*, 188-205.